

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-3 (canceled)

Claim 4 (new): A method for matching human beings with other human beings such that the matched individuals are sexually compatible with each other, where sexually compatible is defined here specifically as the existence of mutual sexual attraction to each other, mutual attraction to each others' natural body odor, and/or robust immune system(s) of any offspring that may or may not be produced by the matched individuals, comprising the steps of: (a) assembling and/or defining a population of human participants, physically and/or virtually, to be matched amongst themselves and/or any future or past participants, in the context of a dating service, dating services, or any other social groups or organizations whose participants' primary intent is to engage in romantic, sexual, reproductive, and/or intimate relationships with other individuals; (b) producing, assembling, and/or observing the class I and class II MHC profiles, in any part or in whole, of all or any fraction of the participants; (c) comparing said profiles of some or all of the participants with said profiles of others and rating the degree of sexual compatibility between any two or more people according to the number of alleles, corresponding to the MHC profiles of step (b), that they have in common, where fewer commonalities, or a greater degree of heterozygosity of said compared MHC profiles, represents a greater degree of sexual compatibility; (d) matching said participants based on said comparisons in such a way that the matched participants have the opportunity to subsequently pursue romantic, sexual, reproductive, and/or intimate relationships with each other, thereby realizing the advantages of this matching process.

Claim 5 (new): A method for matching human beings with other human beings such that the matched individuals are sexually compatible with each other, where sexually compatible is defined here specifically as the existence of mutual sexual attraction to each other, mutual attraction to each others' natural body odor, and/or robust immune system(s) of any offspring that may or may not be produced by the matched individuals, comprising the steps of: (a)

assembling and/or defining a population of human participants, physically and/or virtually, to be matched amongst themselves and/or any future or past participants, in the context of a dating service, dating services, or any other social groups or organizations whose participants' primary intent is to engage in romantic, sexual, reproductive, and/or intimate relationships with other individuals; (b) producing, assembling, and/or observing the class I and class II MHC profiles, in any part or in whole, of all or any fraction of the participants, where said profiles include the HLA-A and HLA-B loci in the class I region, and the DRB1 locus in the class II region; (c) comparing said profiles of some or all of the participants with said profiles of others and rating the degree of sexual compatibility between any two or more people according to the number of alleles, corresponding to the MHC profiles of step (b), that they have in common, where fewer commonalities, or a greater degree of heterozygosity of said compared MHC profiles, represents a greater degree of sexual compatibility; (d) matching said participants based on said comparisons in such a way that the matched participants have the opportunity to subsequently pursue romantic, sexual, reproductive, and/or intimate relationships with each other, thereby realizing the advantages of this matching process.

Claim 6 (new): A method for matching human beings with other human beings such that the matched individuals are sexually compatible with each other, where sexually compatible is defined here specifically as the existence of mutual sexual attraction to each other, mutual attraction to each others' natural body odor, and/or robust immune system(s) of any offspring that may or may not be produced by the matched individuals, comprising the steps of: (a) assembling and/or defining a population of human participants, physically and/or virtually, to be matched amongst themselves and/or any future or past participants, in the context of a dating service, dating services, or any other social groups or organizations whose participants' primary intent is to engage in romantic, sexual, reproductive, and/or intimate relationships with other individuals; (b) producing, assembling, and/or observing the class I and class II MHC profiles of all or any fraction of the participants, where said profiles include the HLA-A and HLA-B loci in the class I region, and the DRB1 locus in the class II region; (c) comparing said profiles of some or all of the participants with said profiles of others and rating the degree of sexual compatibility between any two or more people according to the number of alleles, corresponding to the MHC profiles of step (b), that they have in common, where fewer commonalities, or a greater degree of

heterozygosity of said compared MHC profiles, represents a greater degree of sexual compatibility; (d) matching said participants based on said comparisons in such a way that the matched participants have the opportunity to subsequently pursue romantic, sexual, reproductive, and/or intimate relationships with each other, thereby realizing the advantages of this matching process.